

## **REMARKS**

Claims 1-14 are pending. By this Amendment, Claim 1 is amended. Because support for the amendments to Claim 1 is provided in the application as originally filed, for example, see Figure 1, Applicant respectfully submits that no new matter is presented herein.

### **Claim Rejections Under 35 U.S.C. § 112**

Claims 1-11 are rejected under 35 U.S.C. § 112, first paragraph, for allegedly containing subject matter which was not supported by the application as originally filed. Applicant respectfully traverses the rejection for at least the following reason.

Applicant respectfully submits that the Office Action appears to broadly interpret all gases emitted by the reformation means, fuel cell, and purification means as an “exhaust gas” merely because the gas is being emitted or “exhausted” therefrom.

Applicant respectfully notes that Claim 1 recites that a reform gas is generated by the reformation means, an exhaust gas is discharged by the fuel cell and that the purification means purifies hydrogen in the exhaust gas. The resulting gases emitted from the reformation means, fuel cell and purification means, while all being exhausted in the sense that each of the recited structural components emit a gas therefrom, Applicant has chosen the nomenclature “reform gas” and “exhaust gas” to signal to the reader that each gas is distinct or different from the other. As such, while Applicant agrees that the purification means indeed emits a gas, the gas emitted therefrom is not the same gas as the exhaust gas emitted from the fuel cell or even the reform gas emitted from the reformation means. If such were the case, Applicant would have claimed as such.

Applicant respectfully points out that the rejection misinterprets that which was recited by Claim 1. Regardless, Applicant has amended Claim 1 herein to delete the claim feature in question as such feature is not deemed necessary to patentably distinguish the invention from the teachings reference cited in the Office Action, thereby rendering the rejection moot.

Withdrawal of the rejection is respectfully requested.

**Claim Rejections Under 35 U.S.C. §102/§103**

Claims 1-4, 6-10 and 13 are rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent Application Publication Number 2006/0182680 to Keefer et al. (Keefer). Claims 5 and 12 are rejected under 35 U.S.C. §103(a) as being unpatentable over Keefer et al. (Keefer) as applied to Claims 2-4 above, and further view of Carr et al 4,233,132. Claims 11 and 14 are rejected under 35 U.S.C. §103(a) as being unpatentable over Keefer as applied to Claims 3-4 above, and further view of AAPA.

Applicant respectfully traverses each of the rejections for at least the following reason(s).

Claim 1 recites a hydrogen supply unit including, among other features, a reformation means that reforms a source gas to generate a reformed gas and a fuel cell ***in direct communication with a downstream outlet of the reformation means*** and consuming the reformed gas.

Keefer fails to disclose, teach or remotely suggest such a feature.

Rather, each embodiment of the system disclosed by Keefer clearly and unambiguously discloses the fuel cell (202) being in indirect communication with a downstream outlet of the reformer (204) in view of the purification means (205) being

disposed between the downstream outlet of the reformer (204) and the upstream inlet of the fuel cell (202). Applicant notes that the embodiments of the Keefer system disclosed in Figures 6-9 fail to disclose, teach or otherwise suggest the fuel cell (202) is in direct communication with a downstream outlet of the reformer (204).

Accordingly, applicant respectfully submits that Keefer does not disclose each and every feature recited by Claim 1.

To qualify as prior art under 35 U.S.C. §102, each and every feature recited by a rejected claim must be disclosed by the applied art of record. Since Keefer does not disclose each and every feature recited by Claim 1, Applicant respectfully submits that Keefer does not anticipate Claim 1, and that Claim 1 should be deemed allowable over Keefer.

Carr is applied for disclosing an apparatus that produces purified hydrogen having electrodes separated by a material and means for imposing electrical potential across the electrode generating the hydrogen. As such, Applicant respectfully submits that Carr does not cure the deficiencies of Keefer.

The AAPA is applied for teaching a storage tank that stores purified hydrogen and which has not been used by a fuel cell. Moreover, Applicant notes the AAPA suffers from the exact same deficiency as Keefer, that is, the purifier (33) is disposed directly between the reformer (32) and the fuel cell (34) such that the fuel cell (34) cannot and is not in direct communication with a downstream outlet of the reformer (32). See figure 3 of the instant application. As such, the Applicant respectfully submits that the AAPA also does not cure the deficiencies of Keefer.

Therefore, Applicant respectfully submits that Claim 1 is not anticipated by or rendered obvious in view of the applied art of record, i.e., Keefer, Carr and the AAPA, alone or in any combination thereof.

Claims 2-14 depend from Claim 1. It is respectfully submitted that these dependent claims be deemed allowable for at least the same reason(s) Claim 1 is allowable as well as for the additional subject matter recited therein.

Withdrawal of the rejections is respectfully requested.

### **Conclusion**

In view of the above, reconsideration of the application, withdrawal of the outstanding rejections, allowance of Claims 1-14, and the prompt issuance of a Notice of Allowability is respectfully requested.

Should the Examiner believe anything further is desirable in order to place this application in better condition for allowance, the Examiner is requested to contact the undersigned at the telephone number listed below.

In the event this paper is not considered to be timely filed, the Applicant respectfully petitions for an appropriate extension of time. Any fees for such an extension, together with any additional fees that may be due with respect to this paper, may be charged to counsel's Deposit Account No. 01-2300, **referencing Attorney Dkt. No. 101175.00045.**

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Murat Ozgu', written over a horizontal line.

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